

MOVING YOU FURTHER

HL970

With Tier 4 final / Stage IV Engine installed



* Photo may include optional equipment.

Net Power

230 kW (308 HP) / 2,100 rpm

Gross Power

232 kW (311 HP) / 2,100 rpm

Travel Speed

40.0 km/h (24.9 mph)

Operating Weight

23,500 kg / 51,809 lb



RULE THE GROUND

The HL900 Series wheel loaders are products of HHI's spirit of initiative, creativity, and strong drive. HHI's engineering experts have worked tirelessly to offer a zero-defect product. The new HL900 Series reflects customers' needs in the field gleaned by thorough monitoring. They maximize performance proven by rigorous field tests and quality control. The HL900 Series exceeds customers' expectations! Become a true leader on the ground with HHI's HL900 Series.



* Photo may include optional equipment.

RULE THE GROUND

HL970

The HL900 series exceeds customers' expectation!
Become a true leader on the ground with HHI's HL900 series.



WORK MAX, WORTH MAX

- ECO Gauge
- ECO Pedal
- Engine Automatic Shut-Down
- Electro-Hydraulic Control
- New Weighing System
- Improved Bucket Fill Factor



MORE RELIABLE, MORE SUSTAINABLE

- Sealed Drive Line Center Bearing
- Sinter Brake Disc
- Durable Structure for After-Treatment
- Axle Oil Cooling System (Option)
- Hydraulic Hoses With Heightened Durability
- Reinforced Durability of Front and Rear Frames and Attachment



INFOTAINMENT FRONTIER

- Wifi Direct With Smart Phone (Miracast)
- Intelligent & Wide Touch Screen Monitor
- Audio System



MODERN COMFORT, SIMPLE AND SAFE SOLUTION

- New Air Conditioning System
- Fully Adjustable Seat Armrest, Seat, Control Lever
- Full Sound-Proofed Spacious Cabin
- E-H Control Lever
- Fully Sealed Engine Room & Fully Openable Engine Hood
- Centralized & Easy Access to Service Points
- Consolidated Initial Maintenance Interval



* Photo may include optional equipment.



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New Weighing System

The HL900 Series further improves work precision with additional weight calibration. The automatic/manual cumulative weighing function greatly enhances operating efficiency. Icons displaying weighing errors and the two-color weight value indication on the monitor enable accurate weighing to support efficient production management.

WORK MAX, WORTH MAX

New Engine for Better Performance

Unparalleled performance realized by strong power at low speed and with excellent fuel efficiency! With more powerful performance, HHI's HL900 Series wheel loaders are 10% more fuel-efficient. They maximize productivity, demonstrating higher value in tough environments.



ECO Gauge

ECO Gauge enable economic operation of machines. The gauge level changes color with the engine torque and fuel efficiency level. On top of that, the status of fuel consumption such as average rate and the total amount of fuel consumed are displayed. Hourly and daily based fuel consumption can be checked in the detailed menu as well.



ECO Pedal

When operators use the accelerator pedal, the ECO pedal, which can distinguish between economical operation and power operation, intuitively recognizes economical operation to reduce fuel consumption.



Electro-Hydraulic Control

With improved precision and operability, the electro-hydraulic control system of the HL900 Series provides diverse functions and easy handling to control any working conditions, increasing productivity and reducing fatigue of operators.

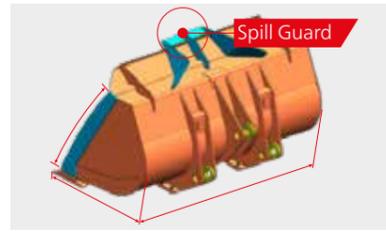
* Fine operation/bucket priority / Auxiliary attachment max flow / Soft end stop



Automatic Shut-Down of Engine (Only Smart Key)

The HL900 Series turns off the engine when it enters the idling state to minimize unnecessary fuel consumption and emissions. Operators can select operating mode and idling time depending on work environments, further enhancing efficiency.

* Operating mode (one time/always/no use); idling time (2 to 40 minutes)
* Usable on button start sw (optional)



Improved Bucket Fill Factor

The bucket design was improved to increase bucket capacity and minimize spillage of loaded materials, greatly enhancing operating efficiency.



5 Speed Lock-up Clutch

By using a 5 speed & Lock up Clutch, the operator can enjoy a reduction in consumption and use various gears, depending on the working conditions.

MORE RELIABLE, MORE SUSTAINABLE

New Exterior Design for More Robustness and Safety

The true value of the HL900 Series, which is now far more powerful, is revealed in tough working environments. With the high-strength design structure and enduring system proven by rigorous road tests at various work sites, HHI's wheel loaders can perform any high-load work to maximize productivity. Durability of frames and attachments have been enhanced by 1.5 times compared to the previous generation 9-series.



Durable Structure for After-Treatment

HHI's wheel loaders have a robust support and shock absorbing system to prevent failure of the aftertreatment system due to shock and vibration during operation, further improving durability.



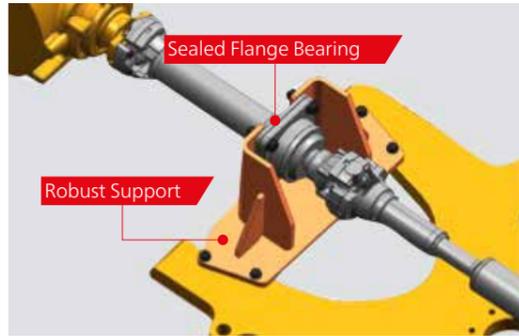
Sinter Brake Disc

The HL900 Series has a sinter disc of a new material with excellent durability to suppress generation of heat and vibration, heightening brake durability and enabling convenient maintenance with a service-friendly design.



Hydraulic Hose

HHI is partnering with the Gates Corporation to supply the highest quality of hydraulic hoses. These new hoses have a 50% improvement of durability over previous hoses.



Sealed Drive Line Center Bearing

HHI's wheel loaders prolong the service life of equipment significantly. They have a sealed drive line center bearing with robust support to retain reliability in the long term.



* Photo may include optional equipment.

Axle Oil Cooling System (Option)

A separate cooling system prevents overheating of axle oil caused by frequent braking and high-load work.

Hydraulic Hoses With Heightened Durability

The new HL900 Series has hydraulic hoses with outstanding heat and pressure resistance, greatly increasing durability.



*Photo may include optional equipment.

INFOTAINMENT FRONTIER

Enhanced Instrument Panel for Easier Monitoring

The HL900 Series is optimized to enable operators to access accurate equipment data in a timely manner. This feature is more important in tough working environments to increase productivity while enjoying various forms of entertainment. Enjoy unparalleled satisfaction provided by infotainment of HHI's state-of-the-art information technology!



Intelligent & Wide Touch Screen Monitor

The seven-inch capacitive-type display (like a smart phone display) of the HL900 Series is larger than the previous model and provides excellent legibility. Audio AUX maximizes convenience of operators.



Audio System

The radio player, integrated Bluetooth hands-free feature, and built-in microphone allow convenient and safe phone calls while in work and in driving.



Soft End Stop

When an attachment reaches at the end stroke, it gives operator enormous shock especially for Boom up. This function gives shock free operation by reducing the speed of attachment near the end stroke. It can be selected on/off through Monitor.

Wifi Direct With Smart Phone (Smart Terminal)

The Miracast system based on WiFi of the operator's smart phone enables easy and convenient use of various features of the smart phone on the big screen including navigation, web surfing, viewing of videos, and listening to music.

MODERN COMFORT, SIMPLE AND SAFE SOLUTION

New Cabin for More Comfort

With top priority on satisfaction of operators in terms of silence, safety, and maintainability, HHI's wheel loaders provide comfortable cabin space for operators by low-vibration, low-noise, and superior safety design. They also offer greater satisfaction by extending the replacement cycle of supplies and minimizing maintenance time and cost.



Fully Adjustable Seat Armrest, Seat, Control Lever

The larger and more comfortable, luxurious with high quality seat (headrest standard; heated seat optional) and adjustable arm rest integrated with control levers for attachments make the cabin space comfortable and pleasant.



Full Sound-Proofed Spacious Cabin

State-of-the-art noise reduction technology of the HL900 Series ensures maximum silence (72 dB) in the same category of equipment, promising more silent and more pleasant interior space.



E-H Control Lever

HHI's wheel loaders have an electro-hydraulic implement control lever. Operators can operate attachments with less strength, enabling greater productivity and minimizing fatigue of operators.



New Air Conditioning System

HHI's wheel loaders maximize heating and cooling performance by optimizing air flow. The air conditioning system is placed on the right side of the cabin to ensure easy maintenance and filter replacement. The capacity of the inner filter was increased. Filter material was changed for superior filtering performance.



* Photo may include optional equipment.

Fully Sealed Engine Room & Fully Openable

The HL900 Series has improved accessibility to the sealed engine room with retractable hood to allow easy cleaning and maintenance. The engine room was designed to prevent possibility of fire due to inflow of foreign materials. The fully retractable engine hood in the electric cylinder opening mode also enhances maintainability of the engine room and cooling room.

Centralized & Easy Access to Service Points

All of the service points for the electric and hydraulic systems are located in easy to reach areas for accessibility and maintenance.

Consolidated Initial Maintenance Interval

The initial replacement cycle of oil and filter is extended to 250 hours to reduce maintenance costs.

Increased Service Life for Engine Air Filter

The HL900 Series has a large-volume air cleaner, an automatic dust ejector, and a three-stage turbo pre-cleaner (optional) to improve the replacement cycle and durability of supplies.

SPECIFICATIONS

ENGINE	
Maker / Model	SCANIA / DC09 085A
Type	Watercooled, 4-cycle, turbocharged charge aircooled, direct injection, electronic controlled diesel engine.
Gross power	232 kW (311 HP) / 2,100 rpm
Net power	230 kW (308 HP) / 2,100 rpm
Maximum torque	174 kg.m (1259 lb.ft) / 1,200 rpm
No. of cylinders	5
Bore x Stroke	130 mm (5.12") x 140 mm (5.51")
Displacement	9.3 l (568 cu in)
Compression ratio	17.0 : 1
Air cleaner	Dry, two stage dual elements
Alternator	24 V, 100 A
Battery	2 x 12 V, 900 CCA
Starting motor	24 V, 6.0 kW

TRANSMISSION	
Torque converter type	3-elements, single-stage single-phase
Tire	26.5 R25, L3

* Full automatic power shift, countershaft type with soft-shift in range and direction. Properly matched torque converter to engine and transmission for excellent working ability.

Travel speed, km/h (mph)	4 speed T/M	5 speed T/M with lock up clutch
Forward	1st	7.3 (4.5)
	2nd	12.2 (7.6)
	3rd	27.2 (16.9)
	4th	40.0 (24.9)
	5th	40.0 (24.9)
Reverse	1st	7.3 (4.5)
	2nd	12.2 (7.6)
	3rd	27.2 (16.9)

AXLES	
Drive system	Four-wheel drive system
Mount	Rigid front axle and oscillating rear axle
Rear axle oscillation	Oscillation $\pm 11^\circ$ of center pin-loaded
Hub reduction	Planetary reduction at wheel end
Differential	Conventional
Reduction ratio	24.666

OVERVIEW			
Description	UNIT	HL970	HL970 XT
Operating weight	kg (lb)	23,500 (51,809)	24,300 (53,572)
Bucket capacity	Heaped	m ³ (yd ³)	4.2 (5.5)
	Struck	m ³ (yd ³)	3.6 (4.7)
Breakout force-bucket	kg (lb)	21,775 (48,006)	21,715 (47,873)
Tipping load	Straight	kg (lb)	18,000 (39,683)
	Full turn	kg (lb)	15,580 (34,348)

TIRES	
Type	Tubeless, loader design tires
Standard	26.5 R25, ★, L3
Options include	26.5-25, 20PR, L3 26.5-25, 20PR, L5 26.5, R25 XHA2 23.5-25, 20PR, L3 26.5-25, 28PR, L3 26.5-25, 32PR, L3

HYDRAULIC SYSTEM	
Type	Load sensing hydraulic system
Pump	Variable displacement piston pump, 323 lpm
Control valve	2 Spool (Bucket, Boom) 3 Spool (Bucket, Boom, Aux)
System pressure	280 kgf/cm ²
Lift Circuit	The valve has four functions; Raise / Hold / Lower / Float Can adjust automatic kickout from horizontal to full lift.
Tilt Circuit	The valve has three functions; Tilt back / Hold / Dump Can adjust automatic bucket positioner to desired load angle.
Cylinder	Type : Double acting No. of cylinders-bore x stroke; Lift 2-160 mm (6.3") x 780 mm (30.7") Tilt 1-180 mm (7.1") x 565 mm (22.2") Tilt 1-180 mm (7.1") x 570 mm (22.4")
Cylinder	HL970 HL970 XT
Cycle Time	Raise: 5.7 sec Dump: 1.4 sec Lower: 3.1 sec Total: 10.2 sec

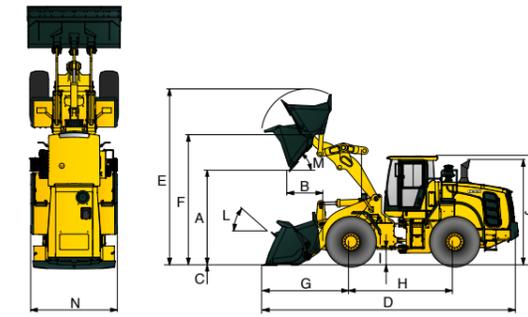
BRAKES	
Service Brakes	Hydraulically actuated, wet disc brakes actuate all 4 wheels independent axle-by-axle system. Self adjusting & wheel speed brake.
Parking Brake	Spring applied, hydraulic released brake
Emergency Brake	When brake oil pressure drops, indicator light alerts operator and parking brake automatically applies.

STEERING SYSTEM	
Type	Load sensing hydrostatic articulated steering
Pump	Variable displacement pump, 208 lpm
Relief Valve Setting	210 kgf/cm ²
Cylinder	Double acting 2-95 mm (3.7") x 480 mm (18.9")
Steering Angle	40° to both right and left angle, respectively

Features:
Center-point frame articulation. Tilt and telescopic steering column.

SERVICE REFILL CAPACITIES	
Fuel tank	300 l (79.3 Us gal)
DEF tank	60 l (15.9 Us gal)
Cooling system	42 l (11.1 Us gal)
Crankcase	36 l (9.5 Us gal)
Transmission	43 l (11.4 Us gal)
Front axle	51 l (13.5 Us gal)
Rear axle	40 l (10.6 Us gal)
Hydraulic tank	152 l (40.2 Us gal)
Hydraulic system (including tank)	276 l (72.9 Us gal)

DIMENSIONS			
All dimensions are approximate.			



Description	UNIT	HL970	HL970 XT
Bucket Type	General purpose bolt-on cutting edge		
A. Dumping clearance at max. height and 45° dump angle.	mm (ft-in)	3,080 (10' 1.3")	3,570 (11' 8.6")
B. Reach	Full lift	mm (ft-in)	1,270 (4' 2.0")
	7ft height	mm (ft-in)	1,905 (6' 3.0")
C. Digging depth	on ground	mm (ft-in)	100 (3.9")
	at carry	mm (ft-in)	8,740 (28' 8.1")
D. Overall length	on ground	mm (ft-in)	9,280 (30' 5.4")
	at carry	mm (ft-in)	8,640 (28' 4.2")

Description	UNIT	HL970	HL970 XT
E. Overall height (fully raised)	mm (ft-in)	5,970 (19' 7.0")	6,460 (21' 2.3")
F. Bucket pivot max. height	mm (ft-in)	4,330 (14' 2.5")	4,815 (15' 9.6")
G. Front overhang	mm (ft-in)	3,025 (9' 11.1")	3,455 (11' 4.0")
H. Wheelbase	mm (ft-in)	3,500 (11' 5.8")	3,500 (11' 5.8")
I. Ground clearance	mm (ft-in)	480 (1' 6.9")	480 (1' 6.9")
J. Height over exhaust	mm (ft-in)	3,515 (11' 6.4")	3,515 (11' 6.4")
K. Height over cab	mm (ft-in)	3,590 (11' 9.3")	3,590 (11' 9.3")
L. Roll-back angle	on ground	deg	43
	at carry	deg	47
M. Dump angle	deg	50	50
Clearance circle	with bucket	mm (ft-in)	11,950 (39' 2.5")
	without bucket	mm (ft-in)	11,950 (39' 2.5")
N. Overall width	with bucket	mm (ft-in)	3,100 (10' 2.1")
	without bucket	mm (ft-in)	2,975 (9' 9.1")

HL970/ DENSITY OF OPERATING MATERIALS		Material Density
Loose Material		
Earth/Clay		1.5 ~ 1.7
Sand and Gravel		1.5 ~ 1.7
Aggregate	25 ~ 76 mm (1" to 3 in)	1.6 ~ 1.7
	19 mm (0.75 in) and larger	1.8

HL970/ DENSITY OF OPERATING MATERIALS		Material Density [t/m ³]																		
Lift arm	Bucket	Type	m ³ (yd ³)	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5
Standard lift arm	General Purpose	Cutting edge	5.2 (6.8)	6.0 m ³ (7.8 yd ³)																
		1-Bolt on tooth	5.0 (6.5)	5.8 m ³ (7.6 yd ³)																
		Cutting edge	4.2 (5.5)	4.8 m ³ (6.3 yd ³)																
		1-Bolt on tooth & segment edge	4.2 (5.5)	4.8 m ³ (6.3 yd ³)																
		2-Bolt on tooth & segment edge	4.2 (5.5)	4.8 m ³ (6.3 yd ³)																
		1-Bolt on tooth	4.0 (5.2)	4.6 m ³ (6.0 yd ³)																
		2-Bolt on tooth	4.0 (5.2)	4.6 m ³ (6.0 yd ³)																
		Cutting edge	3.5 (4.6)	4.0 m ³ (5.2 yd ³)																
		Cutting edge	5.2 (6.8)	6.0 m ³ (7.8 yd ³)																
		1-Bolt on tooth	5.0 (6.5)	5.8 m ³ (7.6 yd ³)																
High lift arm (XTD)	General Purpose	Cutting edge	4.2 (5.5)	4.8 m ³ (6.3 yd ³)																
		1-Bolt on tooth & segment edge	4.2 (5.5)	4.8 m ³ (6.3 yd ³)																
		2-Bolt on tooth & segment edge	4.2 (5.5)	4.8 m ³ (6.3 yd ³)																
		1-Bolt on tooth	4.0 (5.2)	4.6 m ³ (6.0 yd ³)																
		2-Bolt on tooth	4.0 (5.2)	4.6 m ³ (6.0 yd ³)																
		Cutting edge	3.5 (4.6)	4.0 m ³ (5.2 yd ³)																
		Cutting edge	5.2 (6.8)	6.0 m ³ (7.8 yd ³)																
		1-Bolt on tooth	5.0 (6.5)	5.8 m ³ (7.6 yd ³)																
		Cutting edge	4.2 (5.5)	4.8 m ³ (6.3 yd ³)																
		1-Bolt on tooth & segment edge	4.2 (5.5)	4.8 m ³ (6.3 yd ³)																

115% 100% 95%

CABIN & INTERIOR	STD	OPT
Alternator, 100 A	●	
Alarms, audible and visual		
Air filter clogging	●	
Transmission error	●	
Battery voltage	●	
Brake oil pressure	●	
Engine oil pressure	●	
Parking brake	●	
Fuel level	●	
Hydraulic oil temperature	●	
Coolant temperature	●	
Transmission oil temperature	●	
Service brake oil pressure	●	
Coolant level	●	
Water in fuel	●	
Alarm, back-up	●	
Batteries, PT		
925 CCA, 12 V, (2)	●	
Gauges		
Engine coolant temperature	●	
Fuel level	●	
Speedometer	●	
Transmission oil temperature	●	
Horn, electric	●	
Indicator lights		
T/C lock up		●
High beam	●	
Turn signal	●	
FNR joystick steering		●
Pilot cut off	●	
LCD Display		
Clock and fault code	●	
Operating hour counter	●	
Engine rpm	●	
Transmission gear range	●	
Indicator	●	
Job time and distance	●	
Temperature (coolant, hydraulic oil, t/m oil)	●	
Lighting system		
LED dome light	●	
2 stop and tail lights	●	
4 turn signals	●	
Brake lights (counterweight)	●	
2 head lights on front tower	●	
2 working lights on front roof	●	
4 working lights on front roof, 2 working lights on rear roof		●
4 working lights (2 xenon) on front roof, 2 working lights on rear roof		●
4 working lights (LED) on front roof, 2 working lights (LED) on rear roof		●
2 working lights on grill	●	
Switches		
Hazard	●	
Ignition	●	
Parking	●	
Battery master switch	●	
FNR		●
Diff, lock		●
Secondary steering test		●
Pilot cut off	●	
Membrane Switches in monitor		
Main light	●	
Work light	●	
Auto grease		●
Quick coupler		●
Ride control		●
Work load	●	
Beacon lamp		●
Rear wiper	●	
Mirror heat		●
Auto position	●	
Fine modulation		●
Cab (sound suppressed and pressurized) with		
Cigar lighter & ashtray	●	
Coat hook	●	

CABIN & INTERIOR	STD	OPT
Automatic climate control		
Air conditioner & heater	●	
Defroster	●	
Intermittent wiper and washer, front and rear	●	
Seat		
2" retractable seat belt & adjustable	●	
2" static seat belt & adjustable mechanical suspension (heated)		●
3" static seat belt & adjustable mechanical suspension		●
2" retractable seat belt & adjustable air suspension (heated)		●
Personal storage space		
Console box	●	
Holder, can and cup	●	
Rear view mirrors (1 inside)	●	
Rear view mirrors (2 outside)	●	
Rear view mirrors (2 outside, Heated)		●
Steering column, tilt and telescopic	●	
Steering wheel with knob	●	
Roller type sunshade (front window)	●	
Roller type sunshade (rear window)		●
Tinted safety glass	●	
One door cab	●	
Magazine pocket	●	
Pedals		
One accelerator pedal	●	
One brake pedal	●	
Dual-Brake pedal		●
Radio/USB player	●	
Rubber floor mat	●	
Wrist rest	●	
24-volt to 12-volt DC converter (20A)		●
ENGINE		
Antifreeze	●	
Engine, SCANIA, DC09 085A		
Tier 4 Final / Stage 4	●	
Engine enclosure, lockable	●	
Engine fuel priming pump	●	
Fan guard	●	
Fuel/water separator (return)	●	
Clean emission module		
DOC and SCR	●	
Rain cap, engine air intake	●	
Radiator	●	
Fuel heater	●	
Coolant level sight gauge	●	
Engine oil level dipstick gauge	●	
3 Stage Air Precleaner		●
Air cleaner with auto dust eject	●	
POWER TRAIN		
Brakes : Service, enclosed wet-disc	●	
Parking brake	●	
Torque converter	●	
Transmission F4 / R3, computer controlled, electronic soft shift, auto-shift and kick-down features included	●	
Transmission F5 / R3 with lock-up clutch		●
Transmission oil sight level	●	
Limited slip differential (front, rear)		●
Transmission oil cooler	●	
Transmission oil cooler with thermostat		●
Hydraulic lock differential (front)		●
Axle cooling system		●
Tires		
26.5 R25, L3	●	
26.5-25, 20PR, L3		●
26.5-25, 20PR, L5		●
26.5 R25, XHA2		●
23.5-25, 20PR, L3		●
26.5-25, 28PR, L3		●
26.5-25, 32PR, L3		●
Travel speed limiter (20-40 km/h)		●

HYDRAULIC SYSTEM	STD	OPT
Boom kickout, automatic	●	
Bucket positioner, automatic	●	
Diagnostic pressure taps	●	
Hydraulic oil cooler	●	
Hydraulic control, 2 spool	●	
Hydraulic control, 3 spool	●	
Joystick Control (EH control)	●	
Lever control-single axle (EH control)		●
Joystick Steering	●	
Ride control system	●	
Secondary steering system	●	
Extra piping-for auxiliary function		●
Quick coupler piping		●
Auto grease system		●
OTHER		
Articulation locking bar	●	
Counterweight	●	
Optional counter weight		●
Door and cab locks, one key	●	
Doors, service access (locking)	●	
Drawbar with pin	●	
Ergonomically located and slip resistant, left & right	●	
Handrails	●	
Ladders	●	
Platforms	●	
Steps	●	
Fenders (front / rear)	●	
Hydraulic oil level sight gauge	●	
Lift and tie-down hooks	●	
Loader linkage, sealed	●	
Z-bar design	●	
Vandalism protection caplocks	●	
Tool kit		●
Tooth, 1 piece, bolt-on type		●
Tooth, 2 pieces, bolt-on type		●
Cutting edge, bolt-on type		●
Pallet forks		●
Guards		
Crankcase	●	
Transmission	●	
Mud guards	●	
Wheel chock	●	
License plate & lamp		●
Hi MATE (Remote Management System)	●	
Rearview camera	●	
SAFETY		
Beacon light, rotating		●
Fire extinguisher		●
Operator suit		●

STD = Standard
OPT = Optional

- * Standard and optional equipment may vary. Contact your Hyundai dealer for more information.
- * The machine may vary according to International standards.
- * The photos may include attachments and optional equipment that are not available in your area.
- * Materials and specifications are subject to change without advance notice.
- * All imperial measurements rounded off to the nearest pound or inch.
- * The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant HFC-134a (Global Warming Potential = 1430). The system contains 0.75 kg of refrigerant which has a CO₂ equivalent of 1.0725 metric tonne.